Mr. T. Krishna Pillai: Sir, will I be in order to make amendments?

President: Not now.

The resolution was put to vote and declared lost.

RESOLUTION RE: CINCHONA CULTIVATION.

Mr. James Fletcher: My resolution is as follows:

"This Council recommends to Government that the Agricultural Department be authorised to select sites in the State where the soil and climatic conditions are suitable for successful Cinchona cultivation and to start cultivation."

Sir, as I understand, Cinchona has been cultivated in Travancore years ago. In the Kannan Devan Hills, Cinchona was cultivated by a company; but the company found it impossible to pay their share-holders any profit and therefore they were compelled to stop the cultivation in Travancore. The reason why it failed is this, namely, the variety of Cinchona tree that was planted in the Kannan Devan Hills was of an inferior kind which did not produce as much alkaloid as the Java trees yielded. So much so the company became pauper and they had to stop the cultivation of Cinchona and take to other business. Cinchona trees are still existing in various places in the hills of Travancore. Just because a bad variety was cultivated here, we were not able to produce the necessary quantity of alkaloid from those trees. It is possible to introduce other varieties which will yield as much as Java trees and we can succeed in making it a commercial proposition. Sir, I understand that an expert had been in Travancore and he has recommended strongly that the cultivation of Cinchona trees could be started in Travancore with success. And the Director of Public Health was saying that it is not necessary that alkaloid should be taken and converted into quinine for medicinal purposes. Even the bark of the trees could be used as it is without making any transformation; decoction from the bark, (കഷായം) is as good as quinine. The bark could be taken and sold in large quantities, so that people may use it. Unfortunately Travancore is not still rid of malarial scourge and we want a large quantity of Cinchona or quinine. We purchase quinine for the value of about 40 thousand rupees per year. Thus a large sum of money is being spent for the purchase of quinine. I ask why not we try to produce that quinine in Travancore by cultivating Cinchona trees? Even if we do not succeed in making it a commercial success, yet, it will give work for a large number of people. On that ground, I would support the introduction of Cinchona cultivation in Travancore.

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Another point I would suggest is that as long as we have got land and as long as soil and climate are suitable for the cultivation of Cinchona it is our duty to see that it is planted. I am sure we will succeed, for we have got an Agricultural Department. Further the department will justify its existance only by introducing new commercial crops in Travancore and seeing that it succeeds in Travancore.

Mr. V. Sankara Menon: May I know from the member whether he is aware of the fact that it was tried in Travancore and found a failure?

Mr. James Fletcher: It was found a failure for certain reasons. Those causes can be eliminated by introducing such varieties of trees that will yield more alkaloid. For example, I will remind the honourable members of this House about the new variety of sugarcane.....

Mr. Kochikal P. Balakrishnan Tampi: May I remind the honourable member that the concentration of quinine is as bad as the concentration of worm?

Mr. James Fletcher: I am not aware of it. It is a scientific question. That should be put to doctors.

There are many varieties of sugarcane. A certain variety of sugarcane was introduced in Travancore and it was found that the sugarcane does not yield as much sugar for the same quanity of cane as a certain other variety which was in existence in Java. In Java the Agricultural Department or the scientific experimental department has been very successful in introducing good varieties and they succeeded in the manufacture of sugar on a commercial scale. I would suggest that it is possible in Travancore also to change the variety which would give better alkaloid in the case of Cinchona trees. Therefore I recommend that cultivation of Cinchona trees in places where the soil and climatic conditions are suitable be introduced in Travancore also. I recommend that this resolution be taken into consideration.

Mr. T. Muhammed Ismail: May I know whether there is anything preventing doing that without any authorisation from the Legislature?

Mr. James Fletcher: There is no objection for the Agricultural Department to start the cultivation. As a matter of fact they ought to do it without any recommendation from the Council and it is their duty to experiment and find out how far it is practicable in Travancore.

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Mr. K. R. Narayana Aiyar : Sir, the resolution moved by the honourable member is to the effect that experiments should be conducted in Travancore for the cultivation of Cinchona and the production of quinine. As the honourable member himself says Cinchona cultivation was first introduced in India by the East India Company by about 1860. Naturally the cultivation was taken up on a very extensive scale both by the Government and the planting interest ; but it ended in failure ultimately because the variety chosen for the cultivation was of an inferior kind. It was *Cinchona succiroba* with quinine content of one to two per cent. By about 1890 there was stupendous over-production of quinine in India, Ceylon and Java, with the result that the prices declined considerably and then the industry came to crash. Out of this wreck however Java survived. They spent an enormous amount of money on scientific research so much so, it was said that the cultivation of Cinchona in the Netherlands was an expensive hobly of the Governors-General. The result is that today Java has evolved a variety which is very much superior to any variety in India. Out of the total consumption of 2,10,000 lbs. of quinine India imports 1,40,000 lbs. from Java.

This question engaged the attention of the Central Advisory Board of Health in India in the year 1937 and Government was asked to institute an inquiry as to whether Cinchona could be successfully cultivated in different parts of India to meet the Indian demand. They referred the matter to the Imperial Council of Agrciultural Research. The Council appointed a special Adviser, Mr. Wilson, to institute an enquiry and in the course of his investigations he visited Travancore also. I had occasion to discuss the subject with him. He has submitted a report which is now under the consideration of the Imperial Council of Agricultural Research. There are many points to be taken into consideration in regard to the cultivation of Cinchona in India. The most important of these is the cost of production of quinine and whether we would be able to compete with Java. This question has also been discussed by the Board of Agriculture and the Economic Development Board here and they have framed certain resolutions. Due consideration will be given to the recommendations and a decision will be taken in co-operation with the planting interests, who will be the fittest persons to take to Cinchona cultivation here.

Mr. G. Narayana Aiyar (*Parur, Kunnatnad and Muvattupuzha* cum *Devicolam*) : May I know from the member whether some of the evil effects of quinine were found out lately ?

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Mr. K. R. Narayana Aiyar : I found a report published on that subject in some newspapers. But it has to be ascertained whether it is sufficiently efficacious or not.

Mr. James Fletcher : In view of the answer and the tatement made by the Director, I do not press this resolution.

The resolution was, by leave, withdrawn.

The following resolution was not moved :—

Mr. Kottur Kunjukrishana Pillai ;

"This Council recommends to Government that a committee of officials and non officials be constituted to enquire into the working of the State Transport system with a view to suggest improvements in the service and economies in the administration of the department."

President : The House will now adjourn *sine die*.

The House adjourned *sine die* at 1½·38 P. M.

A. GUNAMONY,
Secretary to the Sri Chitra State Council.

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